

## ABSTRACT OF THE DISCLOSURE

A plurality of trenches are formed so as to penetrate a plurality of interlayer insulating films and silicon nitride films in a vertical direction. An interconnection layer is formed in each of the plurality of trenches such that the interconnection layers are stacked up. A plurality of stacked interconnection layers have the same width, and are provided so as to be stacked up one after another in the vertical direction. Therefore, all the parts of an inductor in the vertical direction contribute as the part for producing eddy current. Thus, a semiconductor device having the inductor which achieves lower resistance and a method of manufacturing the same can be obtained.